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14. ABSTRACT This grant covered costs associated with planning for the use of Seagliders in PhilSea10, including travel to meetings in Seattle at the Applied Physics Laboratory, in San Diego at the Scripps Institution of Oceanography, and Taipei. This planning work led to subsequent grants to cover Seaglider acquisitions (N00014-09-1-0892) and experiment execution and data analysis (N00014-10-1-0334). There are currently four Seagliders operating in PhilSea10, to be recovered in March-April 2011.						
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**Acoustic Seaglider:
Planning for the Philippine Sea Experiment 2010-2011**

Award Number: N00014-09-1-0171

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Within the context of the ONR Ocean Acoustics Deep Water experiment in the Philippine Sea – PhilSea10 – Seagliders can serve as a pivotal, multipurpose platform for acoustics to support research in acoustic propagation, tomography, ambient sound, navigation and communications, while at the same time providing the more conventional temperature and salinity point/profile data. Assimilating travel time data into models will improve oceanographic and acoustic predictions; this will test many elements of the integrated end-to-end data-modeling-prediction-detection system. At a very basic level, this will replicating the Moving Ship Tomography 1991 experiment, with gliders replacing the ship as the platform carrying the receivers – a step that clearly reduces cost and complexity while providing significantly higher resolution of the spatially and temporally varying ocean.

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